



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,469	12/31/2003	Larry C. Hardin	WOG 2948.0022	9865
152	7590	07/26/2006	EXAMINER	
CHERNOFF, VILHAUER, MCCLUNG & STENZEL 1600 ODS TOWER 601 SW SECOND AVENUE PORTLAND, OR 97204-3157			YAM, STEPHEN K	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/750,469	HARDIN ET AL.	
	Examiner	Art Unit	
	Stephen Yam	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,10 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,8,10 and 12-16 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Amendments and remarks filed on March 8, 2006. Claims 1-6, 8, 10, and 12-16 are currently pending.

Claim Objections

1. Claim 1 is objected to because of the following informalities:

In Claim 1, line 4, a comma should be placed after "a common field of view".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Long US Patent No. 3,811,010.

Regarding Claim 1, Long teaches (see Fig. 1-4) an intrusion detection system comprising a pair of optical lenses (in television cameras (10, 12), since television cameras inherently have a focusing lens) arranged a predetermined distance apart (see Fig. 1 and 3) and at a predetermined height (height of tripod on which camera is mounted) above a ground reference plane (ground) and having overlapping fields of view within an area (1, 2, 3) (see Fig. 1 and 3) to be monitored to form a common field of view (see Fig. 1 and 3), at least one light-sensitive device (10, 12)

Art Unit: 2878

responsive to light from each of the optical lenses, a range discriminator (determining correlation of positions- see Col. 4, lines 55-60) for setting at least one range gate (2) so as to sense objects within said common field of view within predetermined ranges (within zone 2) (see Fig. 3) and for ignoring objects that appear outside of said predetermined ranges (see Col. 1, lines 39-43, Col. 3, lines 12-25, and Col. 4, lines 55-60), and a range detector (42) responsive to signals from said light-sensitive device operable to determine a range (see Col. 2, lines 48-52, 65-67, and Col. 3, lines 53-57) to an object within the common field of view and within said predetermined ranges ("E... L"- see Fig. 3 and 4). Long does not teach said pair of lenses being tilted in a downward direction towards said ground reference plane. It is well known in the art to adjust the position and orientation of a sensing system, depending on the desired detection area. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide said pair of lenses being tilted in a downward direction towards said ground reference plane, in the system of Long, to define a proximate detection area in relation to the cameras, and since it has been held that rearranging parts of an invention involves only routine skill in the art.

In re Japikse, 86 USPQ 70.

Regarding Claim 2, Long teaches (see Fig. 1 and 3) a light-sensitive device (10, 12) for each lens.

Allowable Subject Matter

4. Claims 6, 8, 10, and 12-16 are allowed over the prior art of record.

Art Unit: 2878

5. Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding Claim 3, the invention as claimed, specifically in combination with the pair of optical lenses tilted in a downward direction towards said ground reference plane, with the light-sensitive devices including light-sensitive elements in lines of pixels operably selected by the range discriminator to define the ranges included within the range gate, is not disclosed or made obvious by the prior art of record, is not disclosed or made obvious by the prior art of record.

Regarding Claim 6, the invention as claimed, specifically in combination with the electro-optical devices tilted in a downward direction, with a range gate selector for creating multiple zones of ranges within said secure area to be monitored by selecting predetermined ones of said multiple lines of pixels in each said respective pixel array and extracting image data therefrom, is not disclosed or made obvious by the prior art of record.

Regarding Claim 14, the invention as claimed, specifically in combination with the pair of sensors aimed downward into said secured area at an angle obtuse to a horizontal reference line, with a range gate selector for selecting predetermined lines of pixels for processing scanned image data from objects appearing at predetermined ranges to determine a range to each of said objects appearing within said secure area at ranges defined by said range gate selector, is not disclosed or made obvious by the prior art of record.

Response to Arguments

7. Applicant's arguments filed March 8, 2006 have been fully considered but they are not persuasive.

Applicant argues that Long does not teach the determination of range of detected objects, but rather only monitors a specific location that is at a known range. Examiner asserts that Long provides detection at multiple known range points within the common field of view of the two cameras, such as H, I, J, K, as seen in Fig. 3 and 4, and that such ranges are known, as Long recites:

"In another aspect of the invention two synchronized TV cameras are positioned to monitor a three dimensional locale, the video outputs of the cameras being passed to the monitor to produce dual images as the object passes through the depth of the locale and a single image when the object meets a mid-depth portion of the locale at which point the object is precisely located in depth and in relation to the width of the area monitored. (Col. 1, lines 43-52)

"The thickness of the area is controlled by the spacing of the cameras, and the distance the cameras are from the monitored locale" (Col. 3, lines 5-7)

"Thus far applicant's invention as been described in a form utilizing a comparator-adder analyzer to precisely locate, on a TV monitor screen, the exact location of an intrusion object in a three dimensional locale of interest being monitored" (Col. 3, lines 53-57)

Thus, Examiner asserts that Long discloses the determination of range of the detected objects, based on a known location and depth of each of the spots H-K in Fig. 3-4.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nishigaki et al. US 6,853,738 teach a similar device with a range discriminator for setting a range gate.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Yam whose telephone number is (571)272-2449. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

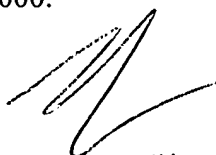
Art Unit: 2878

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571)272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SY

SY


THANH X. LUU
PRIMARY EXAMINER